PARIS: BIGGEST EVER . . .

Two General Dynamics F-111s are attending, Nos 19 and 20 of the pre-production batch. Displayed statically is No 20 (with the extended FB-111 wing but the unboomed undercarriage of the F-111A for Tactical Air Command). The flight display aeroplane, No 19, is a standard F-111A. The two aircraft flew from Loring AFB, Maine, on Monday of last week in a non-stop, non-refuelled transatlantic hop, the standard A detaching to land at Wethersfield for demonstrations in Britain, and the hybrid continuing direct to Le Bourget. The flight leader, Col Ray Roberts, reported that the 3,100 n.m. flight was made with full internal fuel at the optimum cruise sweep of 26°, at an initial cruise altitude of 29,000ft, rising to 35,000ft over France. The landing was made at 120kt, still with 26° sweep, after 5hr 55min, including 25min ATC delay before landing. The on-board inertial navigational system was the only cruise navaid used and the afterburners were used only for take-off.

On landing, 14 hours' fuel remained.

Questioned at Paris about the engine/intake problems, Col Roberts said that three aircraft engaged at Fort Worth in a test programme evaluating various solutions had made considerable progress in the last few months, with changes made to the intake BLC system and the duct aerodynamics. Both the intakes and the boundary-layer channels behind the splitter plates were very well blanked off on the static-park aeroplane, preventing inspection. Low-level supersonic tests were continuing, said Col Roberts, and most of the test points in the flutter programme had been reached. Results of low-level supersonic flights with the terrain-following radar and autopilot operative had been "very impressive". Turning to the problematical F-111B and its Phoenix missile system, he said that two aircraft were engaged on Phoenix trials and good results had been realised in the first test firings.

On the stand of EWR (Entwicklungsring Sud) the shape of the German/American AVS (advanced vertical strike) aircraft is shown for the first time. With swing wings and jet lift this is perhaps Europe's most ambitious military project. Two vectored-thrust engines mounted in the rear fuselage provide the primary propulsion system while four lift engines, mounted in two pairs, swing out from their retracted position in the fuselage sides for operation. These engines also pivot into a horizontal position to provide forward thrust to supplement that of the propulsion engines.

The lift engines will be built jointly by Rolls-Royce and Allison, while the contract for the vectored-thrust engine (Pratt & Whitney JTF16s or General Electric GE110s) will be awarded in October, when the system-definition phase will be completed. A contract for 12 development aeroplanes is expected to be signed next February if the programme goes ahead. The cost is estimated at between $400 million and $500 million, and the first aircraft should fly in 1972-73.

The Dornier P.360 is an advanced STOL project which is strikingly similar to the Hawker Siddeley 681 cancelled in 1965. Installed power would be four Rolls-Royce Spey vectored-thrust